

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
25 March 2004 (25.03.2004)

PCT

(10) International Publication Number
WO 2004/025691 A1

(51) International Patent Classification⁷: **H01J 61/82**,
61/12

(21) International Application Number:
PCT/IB2003/003851

(22) International Filing Date: 29 August 2003 (29.08.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
102 42 203.6 10 September 2002 (10.09.2002) DE

(71) Applicant (for DE only): **PHILIPS INTELLECTUAL
PROPERTY & STANDARDS GMBH** [DE/DE]; Stein-
damm 94, 20099 Hamburg (DE).

(71) Applicant (for all designated States except DE, US):
KONINKLIJKE PHILIPS ELECTRONICS N.V.
[NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven
(NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SCHÖLLER**,
Klaus [DE/DE]; c/o Philips Intellectual Property &

Standards GmbH, Weissshausstr. 2, 52066 Aachen (DE).
GERVELMEYER, Rolf [DE/DE]; c/o Philips Intellec-
tual Property & Standards GmbH, Weissshausstr. 2, 52066
Aachen (DE).

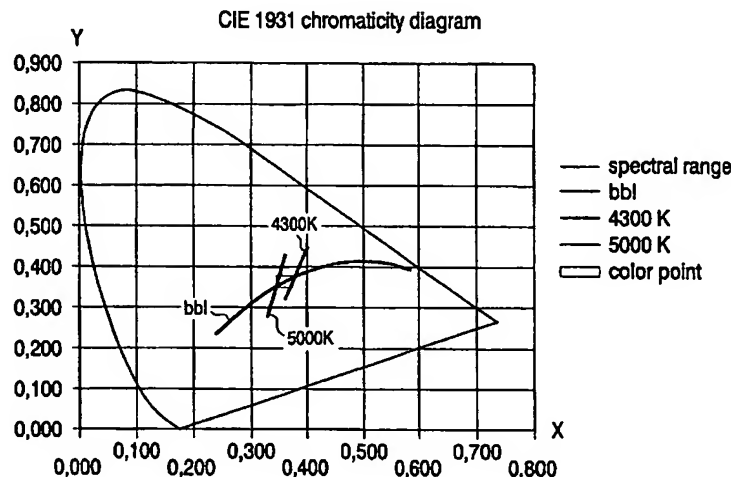
(74) Agent: **MEYER, Michael**; Philips Intellectual Property &
Standards GmbH, Weissshausstr. 2, 52066 Aachen (DE).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,
SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: HIGH-PRESSURE DISCHARGE LAMP WITH IMPROVED COLOR POINT STABILITY AND HIGH LUMINOUS EFFICACY



(57) Abstract: The invention relates to a high-pressure discharge lamp which is suitable in particular for motor vehicle headlights, and which has an improved color point stability close to the black body locus, a high color temperature, and a high luminous efficacy (lm/W). The high-pressure discharge lamp according to the invention comprises an inner vessel with a discharge chamber, with at least two electrodes extending into the discharge chamber, and possibly an outer bulb surrounding the inner vessel, wherein the discharge chamber contains an ionizable filling comprising: - at least one rare gas, - 0 mg to 10 mg of mercury, and - a metal halide mixture comprising: * 40 to 80% by weight of sodium halide, * 25 to 55% by weight of scandium halide, * 1 to 15% by weight of indium halide, and * 0 to 34% by weight of thallium halide.